

REMARKS

The drawings have been objected to due to minor informalities. The figures have been amended as requested by the examiner.

The disclosure has been objected to due to minor informalities. The specification has been amended to correct the informality.

Claim 16 has been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The claim has been amended to obviate the examiner's rejection.

Claims 1-6, 8 -10, 14-15, and 17-21 have been rejected under 35 U.S.C. §102(b) as being anticipated by Probstmeyer, U.S. Patent No. 3,854,658. Claims 1-7, 9-10, 14, and 17-21 have been rejected under 35 U.S.C. §102(b) as being anticipated by Hopfe, U.S. Patent No. 3,880,346.

The examiner's rejections are respectfully traversed.

The applicants' invention as now amended is directed to a solid bowl helical conveyor centrifuge. The centrifuge has a rotating pressure tight drum, including a centrifuge space with a rotatable screw. An inlet tube for supplying a material for centrifugation into the centrifuge space and at least one liquid discharge and at least one solids discharge are also included. The liquid discharge and/or the solid discharge have at least one or more openings in a rotating part of the solid bowl helical conveyor centrifuge such as through openings in the drum wall. The liquid discharge is a scraper disc. A portion, including the area of the opening at the solid discharge, is covered with a pressure tight housing and wherein between the housing and the drum at least one gasket is provided.

Probstmeyer '658 discloses two housings 38 and 37 which are not sealed by elements between the rotating drum and the housing 38. The reference does include rings outside the drum which are typically made of Teflon. However, the rings merely prevent that too large of a leakage occurs at this part. The rings cannot be considered to be air tight sealings.

Hopfe '346, discloses a complete housing for the centrifuge which serves as a protection of the drum and which ensures a separation of solids and liquids. The housing surrounds the entire centrifuge and not just the solids discharge.

Scraper discs are known per se. And a scraper disc provides tight pressure. However, prior to this invention, it was not realized that it is possible to provide a pressure tight drum merely by combining a scraper disc with one single sealed small housing over the solid outlet only. This may appear to be only a small step. However, in reality, any skilled person in the art used a housing 2 as shown in DE3535515 to provide an air tight centrifuge prior to this invention. Thus, the applicants' invention is not anticipated by Probstmeyer'658 or Hopfe '346.

Claims 11-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Probstmeyer '658 or Hopfe '346 in view of EP64039882.

As independent claim 1 is patently distinguishable from the prior art references, the remaining claims dependent therefrom are also patently distinguishable.

In view of the foregoing, it is believed that the amended claims and the claims dependent there from are in proper form. The Applicants respectfully contend that Probstmeyer '658 and Hopfe '346, do not anticipate the claimed invention under the provisions

of 35 U.S.C. § 102(b). Thus, claims 1-6, 8 -10, 14-15, and 17-21 are considered to be patently distinguishable over the prior art of record.

The application is now considered to be in condition for allowance, and an early indication of same is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Arlene J. Powers', is written over a horizontal line.

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IN THE DRAWINGS

Please amend the drawings as indicated on the attached sheets.